

## Extreme precipitation in future climate: why is it so important?

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## Why are we interested in extremes?

- Extreme precipitation essential for the design of infrastructures such as dams, sewer systems, culverts
- Extreme hazards may have huge socio-economic impacts

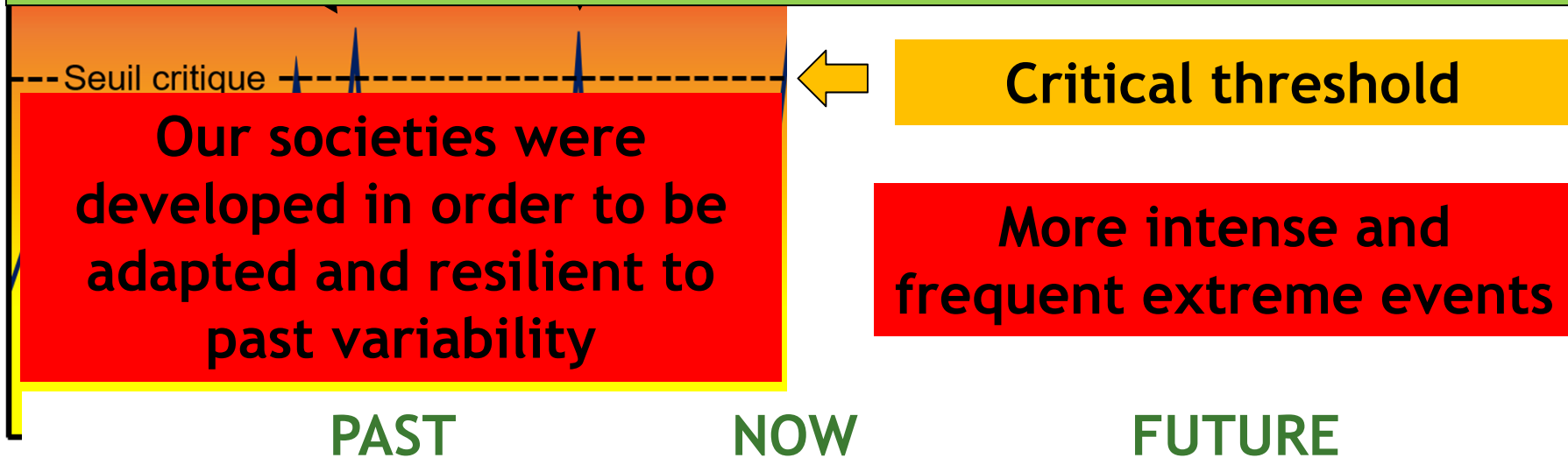


Why is it so important to assess how climate change will impact extreme precipitation?

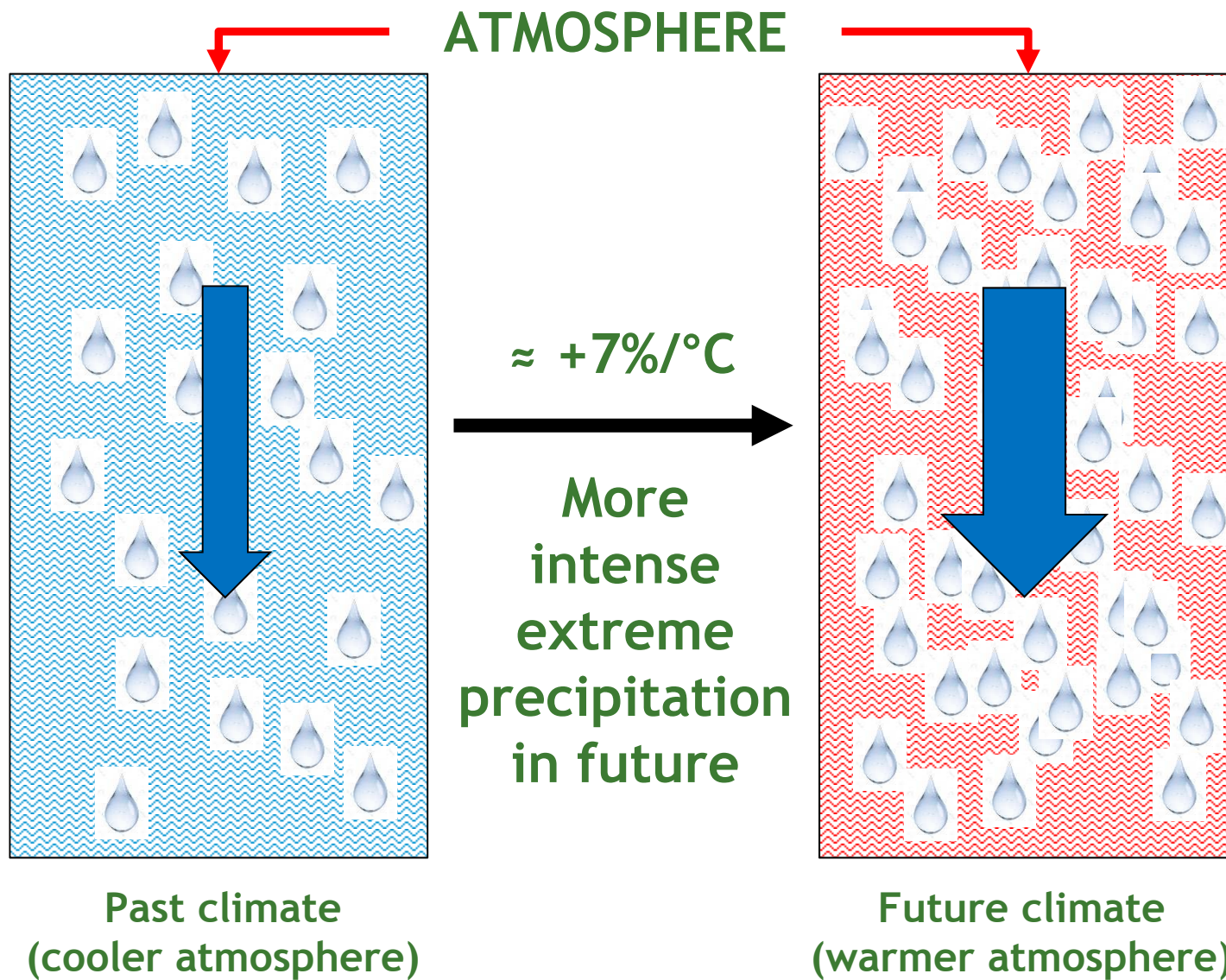


# FUTURE ≠ PAST

Variable climatique



# Why will extreme precipitation be impacted by climate change?



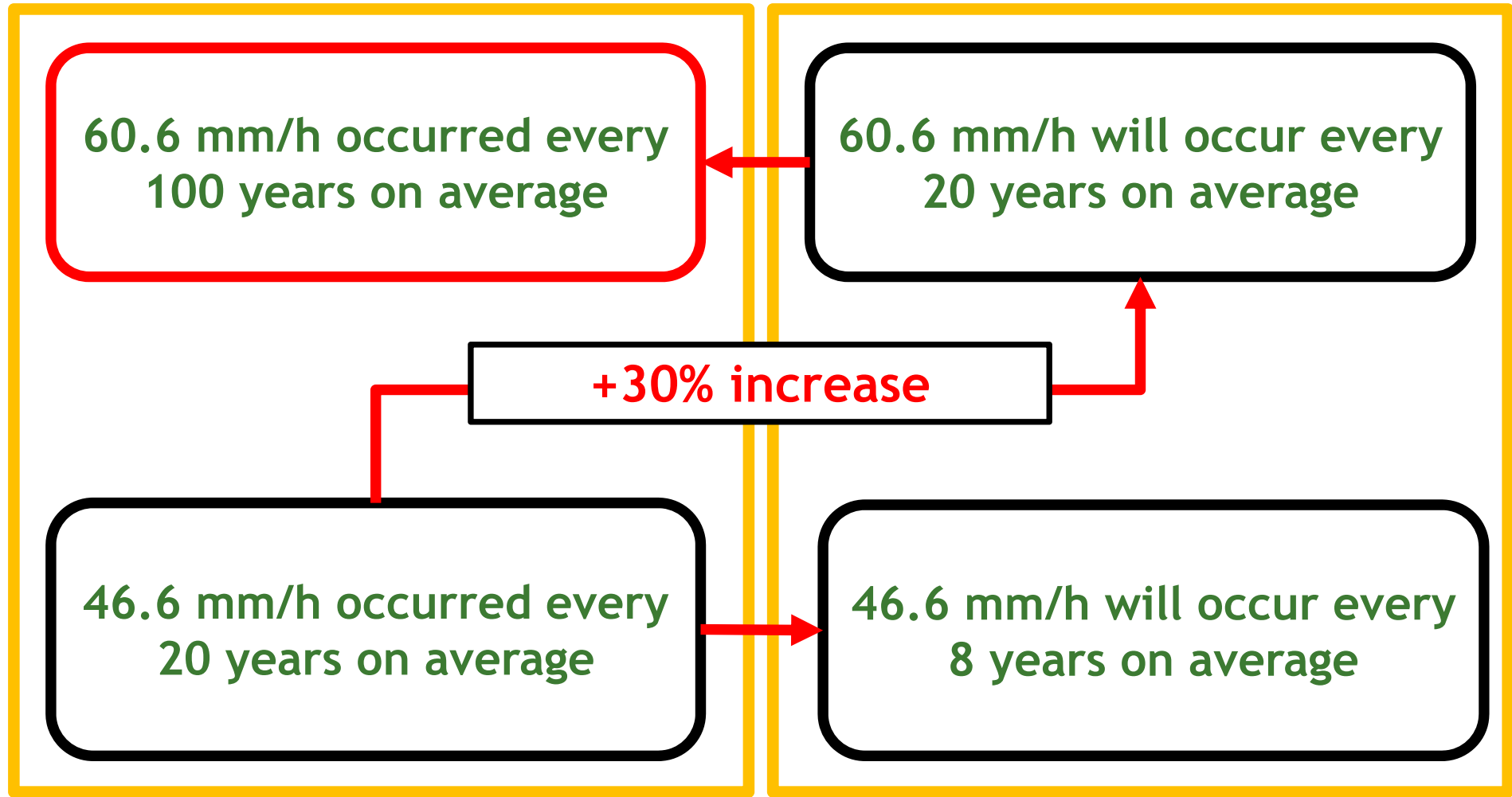


# How could extreme precipitation change in Munich?



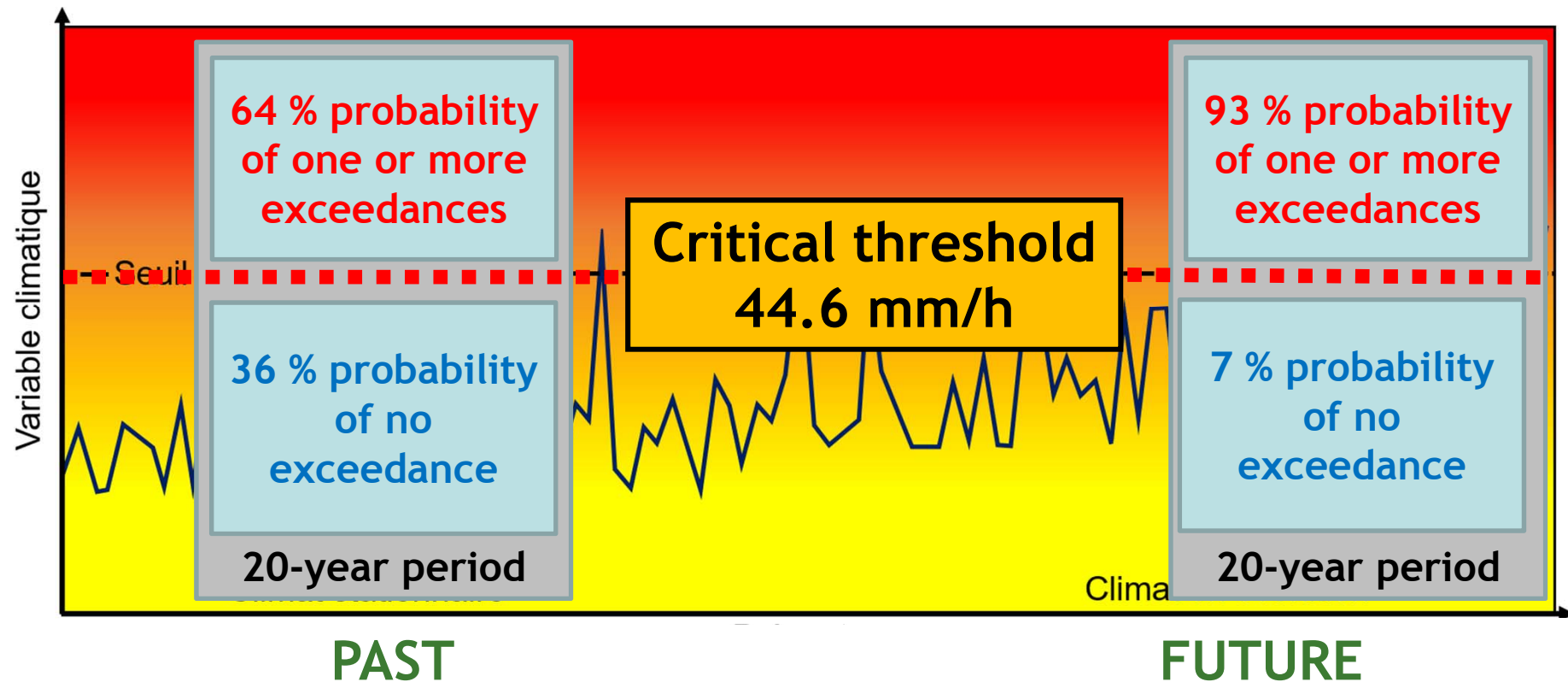
## PAST CLIMATE

## FUTURE CLIMATE



# What do these changes mean exactly?

What is the probability to exceed the 46.6 mm/h critical threshold over a 20-year period?



- Highest extreme precipitation events are more affected
- Short duration extremes are more affected
- Extension of the annual period over which extreme precipitation can occur